

Charged Particle Beam Apparatus and Automatic Astigmatism Adjustment Method

ABSTRACT OF THE DISCLOSURE

According to the invention, techniques for automatically adjusting for
5 astigmatism in a charged particle beam apparatus. Embodiments according to the present
invention can provide a charged particle beam apparatus and an automatic astigmatism
adjustment methods capable of automatically correcting astigmatism and a focal point in
a relatively short period of time by finding a plurality of astigmatism correction quantities
and a focal point correction quantity in a single operation from a relatively small number
10 of 2 dimensional images. Specific embodiments can perform such automatic focusing
while minimizing damages inflicted on subject samples. Embodiments include, among
others, a charged particle optical system for carrying out an inspection, a measurement
and a fabrication with a relatively high degree of accuracy by using a charged particle
beam.

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